STATE OF CALIFORNIA
FISH AND GAME COMMISSION
INITIAL STATEMENT OF REASONS FOR REGULATORY ACTION
(Pre-publication of Notice Statement)

Amend Sections 163 and 163.5
Title 14, California Code of Regulations
Re: Herring Fishery

I. Date of Initial Statement of Reasons: May 22, 2002

II. Dates and Locations of Scheduled Hearings:

(a) Notice Hearing: Date: June 20, 2002
Location: South Lake Tahoe, CA

(b) Discussion Hearing: Date: August 2, 2002
Location: San Luis Obispo, CA

(c) Adoption Hearing: Date: August 30, 2002
Location: Oakland, CA

III. Description of Regulatory Action:

(a) Statement of Specific Purpose of Regulation Change and Factual Basis for Determining that Regulation Change is Reasonably Necessary:

Under existing law, herring may be taken for commercial purposes only under a revocable permit, subject to such regulations as the Fish and Game Commission shall prescribe. Current regulations specify: permittee qualifications; permit application procedures and requirements; permit limitations; permit areas; vessel identification requirements; fishing quotas; seasons; gear restrictions; quotas; and landing and monitoring requirements.

The commercial herring fishery is closely regulated through a catch quota system to provide for adequate protection and utilization of the herring resource. The Department conducts annual assessments of the size of the spawning populations of herring in San Francisco and Tomales bays. These data serve as the basis for establishing fishing quotas for the next successive season. The proposed regulatory changes establish fishing quotas by area for the 2002-03 herring fishing season. In addition, annual management recommendations to improve or provide for the efficient harvest and orderly conduct of the herring fishery, are solicited from interested fishermen and individuals at public meetings and from the Director's Herring Advisory Committee, which is composed of various representatives from the commercial herring fishing industry. The proposed amendments to sections 163 and 163.5, Title 14, CCR, reflect both Department and public recommendations. Annual fishing quotas are conservatively set and have been limited to a total commercial catch of not more than 20 percent (exploitation rate) of the spawning biomass, to ensure adequate protection for the herring resource and provide for the long-term yield of the fishery. In practice, the exploitation rate has typically been set at 15 percent of the previous season's spawning biomass estimate. Exploitation rates are not determined by a fixed mathematical formula, but are modified based on additional biological data collected each season, such as growth rates of herring, strength

of individual year-classes, and predicted size of incoming year-classes (i.e., recruitment). For example, in response to poor recruitment and/or unfavorable oceanographic conditions, exploitation rates for the 1992-93, 1993-94, 1994-95, 1997-98, 2000-01, and 2001-02 fishing seasons in San Francisco Bay were set at less than 15 percent (12, 10, 12, 12, 10, and 12 percent, respectively).

The 2001-02 spawning biomass estimate for San Francisco Bay is 35,400 tons (including catch), which is a 5 percent decline from last season's estimate. Since the 1997-98 El Niño, the San Francisco Bay stock appears to have stabilized at a level well below the 24-year average of 52,255 tons. Herring samples taken this season indicate average recruitment of young fish (2- and 3-year-olds combined). However, older fish (4-, 5-, and 6-year-olds) remained well below average abundance this season and are entirely absent for some year classes (7 and 8 year-olds). The average recruitment of young fish and below-average abundance of older fish are the primary reason for the 2001-02 season's below-average spawning biomass.

The herring young-of-the-year (YOY) abundance indices for the 2000 and 2001 year classes, which could recruit next season as 3- and 2-year-olds, respectively, are the highest indices since the 1986 year class. Although the correlation is weak, the strength of the YOY indices for the 2000 and 2001 year classes may indicate favorable environmental conditions for survival, growth, and potential recruitment as 3- and 2-year olds. Until such time as the Department can determine the recruitment strength of these year classes, a conservative exploitation rate (<15 percent) is recommended.

A fishing quota of 3,540 tons, representing 10 percent of the 35,400-ton estimated spawning biomass, is proposed for the 2002-03 San Francisco Bay herring fishery. This represents a 21 percent decrease from the 2001-02 season quota. The conservative 3,540 ton quota proposal accounts for the below-average 2001-02 spawning biomass estimate, less abundant older age classes, and anticipates the potential of emerging El Niño conditions that may result in unfavorable conditions affecting the growth and survival of herring.

Within the overall quota in San Francisco Bay, separate quotas are established for each gill net platoon (i.e., December ("DH"), Odd, and Even fishing groups). The overall quota is divided among the three platoons in proportion to the number of permits assigned to each platoon. Slight annual adjustments in the quota assignments for each fishing group are needed to account for attrition of permittees and the use of herring permits in the herring eggs on kelp fishery.

The 2001-02 spawning biomass estimate for Tomales Bay is 7,243 tons, which is 73 percent greater than the 2000-01 biomass estimate of 4,196 tons. The average seasonal biomass over the past twenty-nine seasons (4,537 tons) was surpassed by 60 percent this season. Compared to the average seasonal biomass for Tomales Bay over the preceding nine years (2,772 tons), since the herring fishery was re-opened in the 1992-93, the 2001-02 season biomass estimate surpassed that average by 161 percent. This large spawning biomass has only been surpassed twice in the thirty-season history of the fishery (in 1977-78 and 1982-83). During the 2001-02 season, the commercial gill net catch for the Tomales Bay herring fishery was

below the Department's established maximum seasonal quota, but did surpass the 300 ton initial quota. While the Department generally sets Tomales Bay initial quotas at a conservative 10 percent of the previous season's spawning biomass (half of the 20 percent maximum exploitation rate stated in the herring management plan), the exploitation rate for this fishery has not been more than 7.1 percent since the 1996-97 season, when the exploitation rate was 14.7 percent.

For the 2002-03 season, the Department proposes to set the initial catch quota at 300 tons, which is 4.1 percent of the 2001-02 estimated spawning biomass of 7,243 tons. Although the proposed initial quota is set at an exploitation rate well below the level typically applied by the Department, historic landings trends for Tomales Bay have shown that, in some seasons following years of high herring biomass in Tomales Bay, large initial catch quotas (>300 tons) have resulted in high exploitation rates of greater than 15 percent (e.g., 1986-87 and 1994-95). The 2001-02 biomass estimate is significant when compared with recent seasons, and may indicate a peak in the population size. Based on the fluctuation in herring biomasses in Tomales Bay over the past 30 seasons, it is unlikely that the 2002-03 biomass will surpass the 2001-02 estimate. In addition, the Department is in the midst of a mesh size reduction study that allows permittees to use a gill net mesh size of 2 inches, smaller than the 2 1/8 inch mesh normally allowed. Proposing a quota based on 10 percent of the 2001-02 spawning biomass, with unknown effects of a mesh size reduction, uncertain oceanic conditions, and the historic fluctuations in the herring population would not be consistent with the Department's conservative management strategy. Since the implementation of the one net per permittee restriction, the Tomales Bay commercial catch has only exceeded 300 tons twice, during the 1995-96 and 2001-02 seasons. Thus, a 300-ton initial quota would provide Tomales Bay permittees with a viable fishery, and it is likely that no cessation of fishing effort would result. The proposed regulations also contain provisions to increase the quota based on in-season estimates of spawning escapement. If the spawning escapement reaches or exceeds 3,000 tons prior to February 15, 2003, the quota shall be increased as follows: 1) If the spawning escapement is more than 3,000 tons, the total take of herring shall not exceed 400 tons for the season; 2) If the spawning escapement is more than 4,000 tons, the total take of herring shall not exceed 500 tons for the season.

No changes to the regulations pertaining to quotas are proposed for Humboldt Bay or Crescent City Harbor herring fisheries.

Season opening and closing dates for San Francisco and Tomales bays, as well as the dates of various provisions of the regulations, are adjusted each year to account for annual changes in the calendar. The consensus of the Director's Herring Advisory Committee which met on March 27, 2002, was to recommend that the dates of the roe herring fisheries in San Francisco Bay be set from 5:00 p.m. on Sunday, December 1, 2002 to noon on Friday, December 20, 2002 ("DH" gill net platoon only), and from 5:00 p.m. on Sunday, January 5, 2003 to noon on Friday, March 14, 2003. The consensus among Tomales Bay permittees was to recommend opening at 5:00 p.m. on

Sunday, December 29, 2002 until noon on Tuesday, December 31, 2002, and from 5:00 p.m. on Sunday, January 5, 2003, to noon on Friday, March 7, 2003.

Mesh size is used to control the size of fish targeted by the fishery. Existing regulations for the Tomales Bay fishery provided for the experimental use of a gill net mesh size of no less than 2 inches or no greater than 2 ½ inches for the 2001-02 roe herring fishery season only. This was the second consecutive season that the experimental mesh size was used. The minimum mesh size of 2 inches in the Tomales Bay gill net fishery allowed the Department to continue to: 1) evaluate the use of this mesh size on the size and age composition of the current population, and 2) assess whether increased catch per unit effort (CPUE) could be obtained for the catch and still maintain the Department's management goal of a conservative 10 percent, or less, exploitation rate. The Department has found that management goals regarding which age classes were caught were maintained with the use of mesh size of no less than 2 inches during the 2001-02 season. The current regulation specifies that the mesh size shall revert to no less than 2 1/8 inches or greater than 2 ½ inches after the 2001-02 season, unless otherwise designated herein. However, the Department believes that a study period of more than two years is necessary to obtain sufficient data to evaluate the use of this mesh length, assess its impact on CPUE, and maintenance of Department management goals. The Department recommends continuation of the use of a gill net mesh size of no less than 2 inches or greater than 2 ½ inches in Tomales Bay for the 2002-03 herring roe fishery season only. The Department will re-evaluate whether to continue with this experimental mesh size following the 2002-03 season.

Existing regulations provide for a mesh size study in San Francisco Bay. This study is critical for evaluating the optimal mesh size for selecting age classes of herring specified in our current environmental document and management approach. The regulations currently state that research nets shall be supplied by the participating permittee, and state the amount of tonnage of herring that each participant may take during the season. The specified tonnage was based on the average tonnage per gill net permit calculated from that season's quota, which is adjusted yearly to account for changes in the spawning stock biomass estimate. The proposed regulation removes the specific tonnage for each individual research quota and specifies that an individual research quota will be based on a specific percent of the gill net quota as it changes each season. This regulation will meet the goal of tying the research provision to the season's quota, but will omit the necessity to revise this section of the regulations each year. The Department recommends individual research quotas of 0.5 percent of the seasonal gill net quota, for each platoon to which a permit is assigned (i.e., one for a single gill net permit, and two for a CH permit). Since the commencement of the mesh size study during the 1999-2000 season, interest among permittees in participation has been low due to unprofitable compensation provisions and low quotas. Incentives are needed to make participation profitable for herring permittees so that this important research project can resume in the 2002-03 season. A 0.5-percent-per-platoon individual quota will encourage participation in the study and help to offset costs associated with participation, such as nets, fuel, and additional time requirements on the water. This will increase the incentive for

profitable participation without having a significant impact on the resource, and is also supported by members of the industry.

Existing regulations specify that no more than three permittees (designated by the Department in writing) may participate in Department-sponsored research on mesh size. The selection of three permittees was made to allow one participant on a single vessel in each platoon. However, the first unnumbered paragraph of Section 163 allows two permits to jointly fish on a single vessel. The use of two permits and, therefore, two nets on a fishing vessel designated for research will improve the efficiency and collection of research data without adversely impacting the resource or its management. Therefore, we propose to increase the number from three permits to no more than six permits.

The regulations allocate twenty tons of herring from within the overall San Francisco Bay quota to the fresh fish market, to which a maximum of 10 permits are assigned. In order to avoid unfair reduction of herring quota available to gill net permittees not participating in research on mesh size, the Department proposed to reallocate tonnage from the allowable take of herring from the San Francisco Bay fresh fish market for one season only. No landings have been made in the herring fresh fish fishery during the past several years. The Commission therefore adopted a one-year change to the regulations to provide for 10 tons of quota to be transferred from the 20 tons of the historically underutilized herring fresh fish fishery quota to the gill net fishery for use in the study. The Department recommends the continuation of this provision for the 2002-03 season and finds, based on the underutilization of the fresh fish quota, that continued re-allocation of half of the current quota will not result in economic hardship for those who wish to participate in the fresh fish fishery.

The first unnumbered paragraph of Section 163 specifies that a permittee shall be aboard the vessel named on their permit at all times during herring fishing operations, except that a Department-authorized crew member may serve temporarily in a permittee's place aboard the vessel during a season. In addition, regulations in subsection 163.5(f)(2) assign points to category I and II violations for monetary penalties for compromise settlement agreements, and assign 10 points for failure of permittee to be aboard the vessel during herring fishing operations. The proposed amendment to subsection 163.5(f)(2)(B)(7.) would apply the same penalty points to the permit if a crewmember authorized by the Department to serve as a temporary substitute for the permittee failed to be aboard the vessel during herring fishing operations. The proposed regulation change would provide for monetary penalties in lieu of suspension or revocation of a herring permit for those permittees who had a temporary substitute at the time of the violation.

Permit areas are defined in the regulations through a combination of points of land or defined landmarks, line-of-sight, and navigational coordinates in the form of latitude and longitude. During the 2001-02 season, it became apparent that some of the coordinates provided in the regulations might be inaccurate. Additionally, some points that did not include coordinates resulted in confusion among both permittees and enforcement regarding interpretation of the

boundaries of certain fishing areas. To reduce confusion over permit areas and fishing boundaries, the proposed regulations employ USGS charts to provide correct navigational coordinates for all positions specified, and correct existing navigational coordinates to be consistent with USGS chart locales.

Other modifications are proposed for the sake of clarity or to make minor editorial changes or for purposes of consistency with other regulations. The proposed amendment adds the Release of Property form number (Form FG-MR-674 (Rev. 5/02)) to the existing referral to the release of property form, wherever specified in Section 163 Title 14, CCR, to reflect revisions made for clarification and simplification.

(b) Authority and Reference Sections from the Fish and Game Code for Regulation:

Authority: Sections 1050, 5510, 8550, 8553 and 8555, Fish and Game Code.
References: Sections 309, 8043, 8550, 8552, 8552.6, 8553, 8554, 8555, 8556, 8557 and 8559, Fish and Game Code.

(c) Specific Technology or Equipment Required by Regulatory Change:

No new or specific technologies or equipment are required as a result of the proposed action.

(d) Identification of Reports or Documents Supporting Regulation Changes:

(1) Minutes, Director's Herring Advisory Committee Meeting, March 27, 2002, Sausalito, California.

(2) Summary, Public Meeting, Pacific Herring Fisheries, April 4, 2002, Sausalito, California.

(3) Summary, Public Meeting, Tomales Bay Herring Fishery, April 4, 2002, Bodega Bay, California.

(4) Informational Handout Packet for herring fisheries in (a) San Francisco Bay; (b) Tomales Bay; (c) Humboldt Bay, Crescent City Harbor.

(5) Release of Property (MRR/WLP 10/93) Revised Form Number (Old Form) and Release of Property (FG-MR-674 (Rev. 5/02) (Revised Form)

(e) Public Discussions of Proposed Regulations Prior to Notice Publication:

(1) In-Season Town Hall Meeting between herring gill net permittees, buyers and the Department, January 19, 2002, Belmont, California.

(2) Director's Herring Advisory Committee Meeting, March 27, 2002, Sausalito, California

(3) Public Meeting, Pacific Herring Fisheries, April 4, 2002, Sausalito, California

(4) Public Meeting, Tomales Bay Herring Fishery, April 4, 2002, Bodega Bay, California.

IV. Description of Reasonable Alternatives to Regulatory Action:

(a) Alternatives to Regulation Change: See Draft Supplemental Environmental Document - Pacific Herring Commercial Fishing Regulations.

(b) No Change Alternative: See Draft Supplemental Environmental Document - Pacific Herring Commercial Fishing Regulations.

(c) Consideration of Alternatives: In view of information currently possessed, no reasonable alternative considered would be more effective in carrying out the purposes for which the regulation is proposed or would be as effective as and less burdensome to the affected private persons than the proposed regulation.

V. Mitigation Measures Required by Regulatory Action:

See Draft Supplemental Environmental Document - Pacific Herring Commercial Fishing Regulations.

VI. Impact of Regulatory Action

The potential for significant statewide adverse economic impacts that might result from the proposed regulatory action has been assessed, and the following initial determinations relative to the required statutory categories have been made:

(a) Significant Statewide Adverse Economic Impact Directly Affecting Businesses, Including the Ability of California Businesses to Compete with Businesses in Other States:

The proposed changes regarding seasons, quota allocations, mesh size study individual quota provisions, coordinates for permit areas and fishing boundaries, and minor editorial changes are not expected to have a significant statewide adverse economic impact on businesses.

The average quota over the history of the San Francisco Bay roe herring fishery (30 seasons) is 6,104 tons. The average quota over the most recent five years has been lower than this (5 season average is 4,924 tons). The proposed quota (3,540 tons) is 42 percent less than the long term average, and thus, in comparison to the long-term average, the proposed decrease in the fishing quota for San Francisco Bay will have a negative impact on some individual fishermen in the short-term. However, the proposed quota reflects appropriate quota levels relative to current population trends. Relative to the reduced quota in 2001-02, the proposed quota for San Francisco Bay represents a decrease in quota which will have a significant but unquantifiable negative short-term impact on some individual fishermen. Despite quota allotments, there is no guarantee that the quota will be caught. In the 1997-98 season, for example, only 20 percent of the quota was caught. The entire quota was caught in the 1998-99 and 2000-01 seasons, but in the 1999-00 season,

only 62 percent of the quota was caught. The proposed gill net quota for San Francisco Bay represents a 14 percent decrease from last year's quota (4,476 tons), and a 6 percent increase relative to last year's catch (3,287 tons). The proposed decrease in the San Francisco Bay quota (compared to the 2001-02 season quota) will have a significant, but unquantifiable, negative short-term impact on herring buyers, and possibly to some small businesses that provide goods and services to the fishing fleet and buyers. Losses in revenue will depend on the ex-vessel price for the season and the quantity and quality of an individual's landings. The decreased revenues for the ten permittees who transfer their quota to the herring eggs on kelp fishery are significant but unquantifiable (compared to the 2001-02 season quota). Any negative impacts relative to the long-term average quota are balanced in the long-run by years when resource abundance and fishing quotas are high.

The proposed action for the Tomales Bay herring fishery will not have a significant statewide adverse economic impact affecting business, which includes the ability of California businesses to compete with businesses in other states. The proposed initial quota of 300 tons is not expected to have a significant negative impact on individual fishermen or herring buyers. In recent years, the initial quota has been based on 10 percent of the previous seasons spawning biomass. The proposed initial catch quota of 300 tons is conservatively based upon 4.1 percent of the estimated spawning biomass from the 2001-02 season. The initial quota is set at just 4.1 percent of the spawning biomass this year, as opposed to 10 percent, because high exploitation rates have sometimes occurred after high biomass seasons. The Department believes that a pro-active and conservative initial quota for the 2002-03 season may prevent a possible over-exploitation of the Tomales Bay herring population. The goal is to help ensure a stable spawning population for the future.

When compared with the commercial catch over the past ten years, only twice (1995-96 and 2001-02 seasons) has the Tomales Bay catch exceeded 300 tons. The commercial catch for the 2001-02 season was 354 tons, which exceeded the season's initial quota of 300 tons, but was only 71 percent of the in-season increased quota of 500 tons. The lower initial quota based on 4.1 percent is unlikely to have an adverse economic impact. The proposed regulations contain provisions for increasing the quota in-season if spawning escapement goals are achieved. The provision for in-season quota increases is a valuable fisheries management tool that provides flexibility to managing the fishery based on the size of the current spawning population. The provision supports the conservation of the resource and realizes the possible economic benefit of allowing a higher catch, if the resource is abundant enough to withstand the fishing pressure. The proposed action will have an unquantifiable impact on some small businesses that provide goods and services to the fleet. In the long-term, these impacts are balanced by the positive economic returns that accrue in those years when resource abundance and fishing quotas are high.

The proposed application of violation points, currently assigned to a permittee not aboard vessel during fishing operations in Section 163.5, to a Department-approved crew member temporarily serving in his or her place aboard the vessel, is not expected to have an adverse economic impact.

The proposed addition of form number is being made for the sake of clarity and will not have an economic impact.

(b) Impact on the Creation or Elimination of Jobs Within the State, the Creation of New Businesses or the Elimination of Existing Businesses, or the Expansion of Businesses in California:

None.

(c) Cost Impacts on a Representative Private Person or Business:

The agency is not aware of any cost impacts that a representative private person or business would necessarily incur in reasonable compliance with the proposed action.

(d) Costs or Savings to State Agencies or Costs/Savings in Federal Funding to the State:

None.

(e) Nondiscretionary Costs/Savings to Local Agencies:

None.

(f) Programs mandated on Local Agencies or School Districts:

None.

(g) Costs Imposed on Any Local Agency or School District that is Required to be Reimbursed Under Part 7 (commencing with Section 17500) of Division 4:

None.

(h) Effect on Housing Costs:

None.

INFORMATIVE DIGEST\POLICY STATEMENT OVERVIEW

Under existing law, herring may be taken for commercial purposes only under a revocable permit, subject to such regulations as the Fish and Game Commission shall prescribe. Current regulations specify: permittee qualifications; permit application procedures and requirements; permit limitations; permit areas; vessel identification requirements; fishing quotas; seasons; gear restrictions; quotas; and landing and monitoring requirements.

The proposed regulatory changes will establish fishing quotas by area for the 2002-03 herring fishing season, based on the most recent assessments of the spawning populations of herring in San Francisco and Tomales bays. The proposed fishing quota in San Francisco Bay is 3,540 tons (10 percent of the 35,400-ton estimated spawning biomass for the 2001-02 season). An initial 300-ton fishing quota (4.1 percent of the 2001-02 estimated spawning biomass of 7,243 tons) is proposed for Tomales Bay with provisions to increase the quota in season if escapement goals are achieved by February 15, 2003. This season, the recommendation for in-season increases is as follows:

- If the spawning escapement is more than 3,000 tons, increase the quota to 400 tons.

- If the spawning escapement is more than 4,000 tons, increase the quota to 500 tons.

The proposed amendment specifies that the length of the meshes of any gill net used or possessed in the roe fishery in Tomales Bay, for the 2002-03 season only, shall be no less than 2 inches or greater than 2 ½ inches. The proposed one-year continuation of the regulation, originally approved for the 2000-01 and 2001-02 seasons only, will allow the Department to continue to evaluate the effect of reduced mesh length on the size and age composition of herring caught in 2 inch mesh gill nets.

Other changes relating to the Department of Fish and Game (Department) herring season dates, permit suspensions, and minor editorial changes are recommended to improve the clarity of the regulations or provide for the efficient harvest and orderly conduct of the fishery and for the protection of the resource. The following is a summary of those proposed changes in sections 163 and 163.5, Title 14, CCR.

- Set the dates of the roe herring fisheries in San Francisco Bay from 5:00 p.m. on Sunday, December 1, 2002 to noon on Friday, December 20, 2002 ("DH" gill net platoon only), and from 5:00 p.m. on Sunday, January 5, 2003 to noon on Friday, March 14, 2003.

- Set the dates of the roe herring fishery in Tomales Bay from 5:00 p.m. on Thursday, December 27, 2002 until noon on Tuesday, December 31, 2002, and from noon on Sunday, January 5, 2003 to noon on Friday, March 7, 2003.

- Correct existing latitude/longitude coordinates for position references, and add latitude/longitude coordinates to existing position references that do not provide associated coordinates.

- Clarify that the violation points assigned for failure of a permittee to be aboard the vessel during herring fishing operations also apply to a permittee's Department-authorized temporary substitute.

- Revise the individual quota provisions for permittee's participating in a

mesh size study in San Francisco Bay to 0.5 percent of the sac roe quota for each platoon to which a permittee is assigned.

- Increase the maximum number of permittee's that may participate in a mesh size study in San Francisco Bay from three to six.

- Transfer 10 tons of quota from the underutilized herring fresh fish fishery to the gill net fishery for use in a gill net mesh size study, for the 2002-03 season only.

- Make minor editorial revisions.